

From Policy to Prevention

Active fatigue and
distraction management

Driving as a Critical Risk

Work-Related Fatalities
From Vehicle Incidents

28%

All Industries

82%

Transport,
Warehousing Sector

Crash Severity

Serious Injury or Fatality vs Minor or No Injury

1/14

No Truck Involved

1/11

Truck Involved

1/9

Truck only

Worksafe NZ – Fatigue

- **28%** of transport workers often fatigued
- Fatigue caused **9% of truck** & **7% of bus** serious crashes (2015-19)
- **<7 h sleep or shift work** = higher crash risk

Bottom line:
Fatigue kills.
Sleep save
lives.

Today's agenda

Linking data,
technology
and policy

Fatigue &
Distraction
in NZ

Case
Study

Driving
change
through
policy

Linking Data, technology + Policy

Fatigue

We wake up

53

drivers a day!

Average of more than two verified fatigue events every hour – enough to fill a large city bus each day with drivers experiencing fatigue on our roads.



Distraction

162 distraction events

38 are cell phone events (23%)

per day for Guardian monitored vehicles.



What is DDAW?

Driver
Drowsiness
and Attention
Warning

EU requirement
by 7 Jul 2024:
All new M/N class vehicles
must include DDAW

Trial & key findings

50-100 vehicles

Baseline (July 2025): Detection live, no alerts

50% of microsleeps preceded by ≥ 1 DDAW event within 30 mins

- Multiple DDAW detections preceded many microsleeps

Intervention (Aug–Sep 2025):

Driver alerts activated + fatigue awareness training

Results (end Sept):

- **57% reduction in fatigue detections**
- Up to 62.5% of monthly microsleeps preceded by DDAW

Confirms
technology's
predictive
capability

TRIAL

Driver Response & Impact

3 drivers
accounted for
56% of all
fatigue events
detected

Actions

- Activated in-cab lightbars
- 1:1 meetings - lifestyle & route fatigue factors
- Fleet-wide fatigue management training

Fatigue outcomes

- Fleet wide - 57% drop
- 3 highest risk drivers improved 88%
- Drivers reported stronger fatigue awareness and self-management

**What practical steps
can you and your
drivers take...?**

Short term alertness boost strategies

Strategy	Tips	Boost Duration	Why it matters
Alert Surprise	When your system alerts you, use that moment to act—don't ignore it.	~10–30 minutes	A fright triggers adrenaline, making you feel awake—but it fades fast and doesn't fix fatigue.
Novelty & Variety	Try something new—change your playlist, take a different route, or spot new landmarks.	~10–20 minutes	New things wake up your brain by triggering curiosity and motivation.
Music	Play your favorite songs or save a great playlist for tough stretches.	~5–20 minutes – the length of the engaging music	Music you love can lift your mood and sharpen focus briefly.
Social	Call a friend or check in with dispatch for a quick chat.	~10–30 minutes based on happiness or fun	Positive contact boosts alertness and helps you feel connected.
Physical	Stretch, walk, or do a few squats during breaks.	~20–60 minutes	Moving gets your blood flowing and helps shake off drowsiness.
Small Wins	Break your trip into mini-goals and reward yourself when you hit them.	Minutes to ~30 minutes	Achieving small goals motivates and sharpens attention.
Sensory	Chew peppermint gum, or use citrus scents.	~5–15 minutes	Pleasant smells or textures can perk you up briefly.

Boosts hide tiredness for a short time

– But only sleep rests the brain.

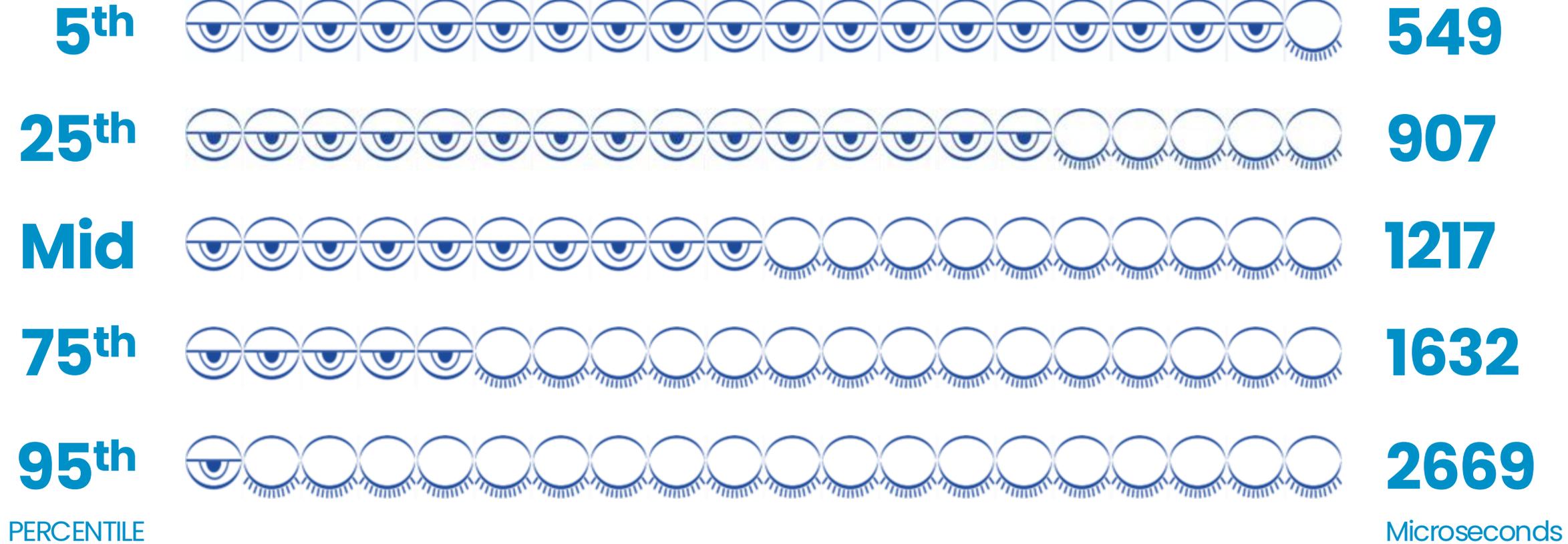
Sleepiness and Blood Alcohol

From .05% BAC (Blood Alcohol Content), you are **2 times higher risk** of being involved in a workplace / driving accident

KSS Score	Karolinska Scale Physiological State	Avg Cognitive Lapses (per 10min)	Typical Lapse Duration (s)	Median RT (ms)	BAC	Operational Risk (NASA)
1	Extremely alert	0	None	250	0%	Low
2	Very Alert	0	None	260	0%	Low
3	Alert	1	0.5	270	0%	Low
4	Fairly Alert	2	0.5–0.7	300	0.02%	Low
5	Neither Alert nor Sleepy	3	0.5–0.8	340	0.02%	Low
6	Some signs of sleepiness	5	0.5–1.0	350	0.04%	Moderate
7	Sleepy, but not difficult to stay awake	8	0.5–1.5	370	0.05%	Moderate
8	Sleepy. Some effort to keep awake	12	0.5–2.5	420	0.08%	High
9	Extremely sleepy, fighting sleep	20	>2.5	475	>0.1%	Critical

Source: 1. Cori JM, Wilkinson VE, Jackson M, Westlake J, Stevens B, Barnes M, Swann P, Howard ME. *The impact of alcohol consumption on commercial eye blink drowsiness detection technology*. Human Psychopharmacology: Clinical and Experimental. 2023;38(4):e2870. doi:10.1002/hup.2870, 2. NASA: Research App Helps Fight Fatigue in Flight, Space and More

Cognitive Lapses and Eye-Closures



NZ-wide Results (Sept 2025)

National rollout underway

- 3,199 active units
- ~30,000 DDAW events
- 1,383 verified sleep events

Early insights

- ~40% of sleep events preceded by DDAW
- 2.5 DDAW events per sleep
- Confirms predictive strength across fleets and conditions

A major step
toward safer
journeys for all
New Zealanders

Awareness

+ Alerts

+ Policy

= Active Fatigue Management

Meaningful Change Requires Clear Policy

SAFE DRIVING POLICY

Helping manage work-related road safety to ensure your employees and vehicles remain safe on the roads.

Is driving
your biggest
workplace
risk?

Regardless of the size of your business, having safe driving policies and initiatives is essential to keep your employees safer while driving at work. This not only helps businesses meet their obligations under the Health & Safety at Work Act (2015) but also reduces risk, ensuring the safety of people and the proper maintenance of vehicles.

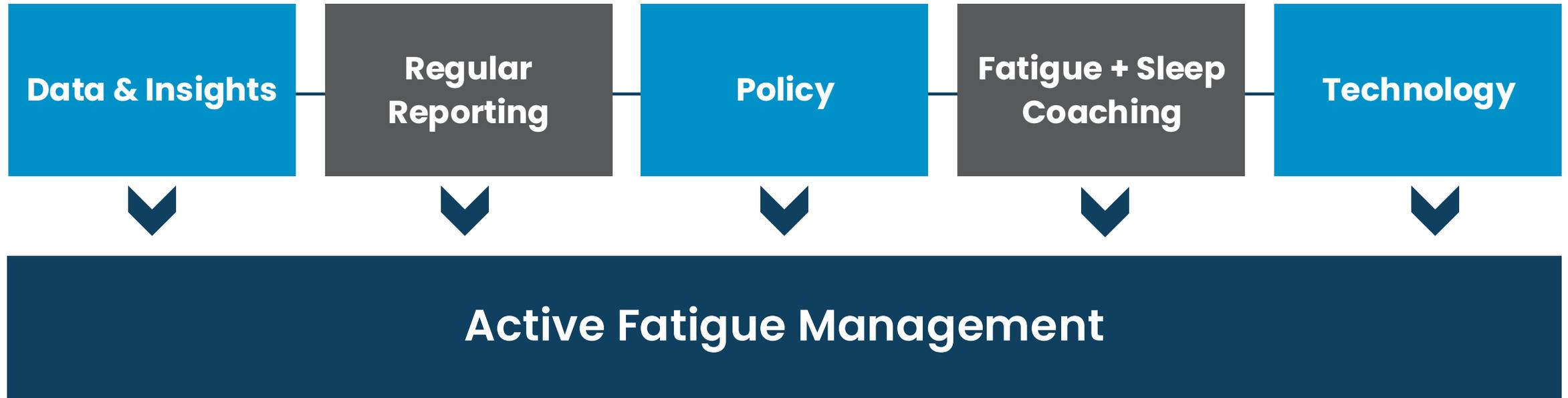
How we can help

- 1 Review Existing Policy**
 - Analyse the current policy.
 - Create an outline including a Fleet Driving procedure (appendix).
 - Draft a new policy if none exists.
- 2 Draft Initial Policy Document**
 - Create a draft policy referencing key legislative documents such as NZTA Safe Driving Good Practices and the Health and Safety at Work Act (2015).
- 3 Internal Review**
 - AutoSense reviews the draft policy.
 - Incorporates driver risk management recommendations.
- 4 Client Review Meeting**
 - AutoSense meet with client to present the draft policy and procedure documents.
 - Gather client feedback.
- 5 Revise and Finalise**
 - AutoSense make the required changes based on client feedback.
 - Final Safe Driving policy and procedure document approval.
- 6 Deliverables**
 - Provide the client with the re-written policy, a Policy Commitment Statement (summary), and Safe Driving Procedures Document.
- 7 Company-wide Implementation**
 - Consider implementing the final Safe Driving Policy across the entire organisation.
 - It is important to incorporate it into your business's health and safety policy and procedures.
 - Ensure all workers, especially those who drive as part of their jobs, are informed about it.
 - By following these steps, you will ensure a thorough and effective implementation of your Safe Driving Policy.

GET IN TOUCH TO BOOK

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Active management of fatigue and distraction



Why policy

Health and
safety

Drives
change

Director
protecting

**Because you
never think it
will happen
to you.**

#EYESUPNZ

